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## CLAIMS

Sub B1  
1. An imaging device, comprising:  
an optical sensor having an output for providing pixel  
signals generated in response to light projected onto  
255 regions of the optical sensor; and  
an amplifier having a first input coupled for  
receiving the pixel signals, a first output for providing  
an imaging signal, and a control input coupled for  
receiving control data to amplify the pixel signals to  
260 different gains when the pixel signals are generated in  
different regions of the optical sensor.

2. The imaging device of claim 1, wherein the optical  
sensor includes a plurality of photoactive devices disposed  
265 in the regions of the optical sensor.

3. The imaging device of claim 2, wherein the optical  
sensor has an address input coupled for receiving pixel  
addresses for selecting the pixel signals in different  
270 orders.

Sub D2  
4. The imaging device of claim 3, further comprising  
a memory circuit for storing the control data, the memory  
circuit having an address input coupled for receiving the  
275 pixel addresses and an output coupled to the control input  
of the amplifier.

5. The imaging device of claim 3, wherein the optical sensor includes a multiplexer having a first input coupled to the output of the optical sensor, and a selection input coupled to the address input of the optical sensor for selecting among photoactive devices of the optical sensor to provide the pixel signals.

6. The imaging device of claim 1, further comprising an analog to digital converter having an input coupled for receiving the imaging signal and an output for providing imaging data.

7. A method of capturing an image, comprising the step of altering a gain of pixel signals through an amplifier in response to control data to compensate for a difference in response to light projected on different regions of an optical sensor.

8. The method of claim 7, further comprising the step of projecting light from the image onto first and second regions of the optical sensor to generate first and second pixel signals, respectively.

9. The method of claim 8, wherein the step of altering includes the steps of:

amplifying the first pixel signal through the amplifier to a first gain; and

amplifying the second pixel signal through the amplifier to a second gain.

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10. The method of claim 9, wherein the first pixel  
signal has a first amplitude when a light intensity is  
310 projected on the first region of the optical sensor, the  
second pixel signal has a second amplitude less than the  
first amplitude when the light intensity is projected on  
the second region of the optical sensor, and the step of  
amplifying the second pixel signal includes the step of  
315 amplifying the second pixel signal through the amplifier to  
the second gain greater than the first gain.

11. The method of claim 8, further comprising the  
step of selecting the first and second regions of the  
320 optical sensor with address data to produce the first and  
second pixel signals.

12. The method of claim 11, wherein the step of  
selecting includes the step of multiplexing the first and  
325 second pixel signals with the address data.

13. The method of claim 12, further comprising the  
steps of:  
storing the control data; and  
330 retrieving the control data with the address data.

<sup>13</sup>/<sub>2</sub> 14. The method of claim 7, further comprising the  
steps of:  
amplifying the pixel signals through the amplifier to  
335 produce an imaging signal; and  
converting the imaging signal to digital imaging data  
for viewing.

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SUB  
B3

340 of: 15. An image capturing method, comprising the steps

sensing light projected on first and second regions of  
an optical sensor to produce first and second pixel  
signals;

345 setting a gain of an amplifier with first control data  
for amplifying the first pixel signal; and

altering the gain of the amplifier with second control  
data for amplifying the second pixel signal to equalize the  
responses of the first and second regions of the optical  
sensor to the light.

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<sup>15</sup>/<sub>2</sub> The method of claim <sup>14</sup>/<sub>2</sub>, wherein the first and  
second pixel signals are amplified to produce a monochrome  
imaging signal.

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